

Abstract Submitted  
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**Thermoelectric Power in Dual-Gated Bilayer Graphene** CHANG-RAN WANG, VINCENT LU, WEI-LI LEE, Institute of Physics, Academia Sinica, INSTITUTE OF PHYSICS, ACADEMIA SINICA TEAM — We have performed thermoelectric transport measurements of dual-gated bilayer graphene device. The thermopower reached a maximum value of  $|S_m|$  when tuning its carrier density by gates. The  $|S_m|$  was found to monotonically increase with displacement field  $D$  introduced through the top and bottom gates. At 100K,  $|S_m|$  attains a value of  $\sim 110$   $\mu\text{V}/\text{K}$  at  $D \sim 1\text{V}/\text{nm}$ , which is nearly two-fold larger than that at  $D = 0$ . The detailed temperature-dependence of  $S_m$  and comparison to the resistivity data will be presented.

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